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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,727	02/15/2002	David F. Gavin	101792-200	2648
27267 7590 05/13/2008 WIGGIN AND DANA LLP ATTENTION: PATENT DOCKETING ONE CENTURY TOWER, P.O. BOX 1832 NEW HAVEN, CT 06508-1832				
			EXAMINER	
			SHIBUYA, MARK LANCE	
		ART UNIT	PAPER NUMBER	
		1639		
		MAIL DATE	DELIVERY MODE	
		05/13/2008	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/077,727

**Applicant(s)**

GAVIN ET AL.

**Examiner**

Mark L. Shibuya, Ph.D.

**Art Unit**

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2, 4, 6-9, 11, 35, 36, 40 and 41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2, 4, 6-9, 11, 35, 36, 40 and 41 is/are rejected.
- 7) ☒ Claim(s) 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Application 10077727, (20020110575 A1): Claims 2, 4, 6-9, 11, 35, 36, 40 and 41 are pending and examined. Claim 41 is newly added. Claim 10 is newly canceled.

#### ***Priority***

2. This application, 10/077,727, filed 2/15/2002, states that it is a divisional of pending application 09/120,664, filed 7/22/1998.

#### ***Withdrawn Claim Objections***

3. Claim 2 is objected to because of the following informalities: The word "essentially" in line 5 appears to be misspelled.

#### ***Withdrawn Claim Rejections***

4. The following claim objections/rejections are withdrawn in view of applicant's arguments and amendments to the claims. Specifically the patent of Hosseini et al., US Pat. No. 5,540,860 does not teach a "ore consisting essentially of substantially insoluble surface oxidized copper powder, cuprous oxide, copper hydroxide, and combinations thereof," as in the amended claims, entered 1/14/2008.
5. Claims 2, 4, 6-10 and 40 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hosseini et al., US Pat.

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No. 5,540,860 (7/96) alone or if necessary further in view of the specification (e.g. page 7, figures (e.g. fig. 2)) and examples (e.g. example 1) to demonstrate inherency (e.g. see *Ex parte Novitski*, 26 USPQ2d 1389 (B.P.A.I., 1993); MPEP 2131.01(d).

6. Claims 2, 4, 6-11 and 40 are rejected under 35 U.S.C. 103(a) over Hosseini et al. and Gavin et al. US Pat. 5,342,437 (8/94).

7. Claims 2, 4, 6-10, 35-37 and 40 under 35 U.S.C. 103(a) over Hosseini et al. '860 alone or in view of the specification (e.g. page 7, figures (e.g. fig. 2) and examples (e.g. example 1) to demonstrate inherency and Kappock et al. US Pat. 5,518,774 (5/96).

#### ***New Claim Objections***

8. Claim 36 appears to have two periods.

#### ***New Claim Rejections - 35 USC § 112, First Paragraph***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 2, 4, 6-9, 11, 35, 36, 40 and 41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

application was filed, had possession of the claimed invention. This rejection is for New Matter.

Applicant's amendment necessitated the new ground(s) of rejection presented.

Independent claims 2 and 41, and the claims that depend from them, now state the newly added claim limitations: "said core consisting essentially of substantially insoluble surface oxidized copper powder, ~~or a copper containing compound selected from the group consisting of~~ cuprous oxide, copper hydroxide, and combinations thereof," which state thereby new matter.

The amended claims now appear to be drawn to a core having **the** combination of surface insoluble of surface oxidized copper powder, cuprous oxide and copper hydroxide as all three together. The examiner respectfully submits that the instant Application, as filed, does not appear to provide support for this newly added claim limitation, but only the claim elements in the alternative.

Furthermore, the claims are now drawn to "substantially insoluble" surface oxidized copper powder. The examiner respectfully submits that the instant Application, as filed, does not appear to provide support for this newly added claim limitation.

The examiner respectfully submits that as applicant did not point, with particularity, as to specifically where in the specification as filed, support may be found for these new limitations in the last amendment, any future traversal of the instant rejection should now do so.

***New Claim Rejections - 35 USC § 112, Second Paragraph***

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 2, 4, 6-9, 11, 35, 36, 40 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant's amendment necessitated the new ground(s) of rejection presented.

The term "substantially insoluble surface oxidized copper powder" in independent claims 2 and 41 is a relative term which renders the claim indefinite. The term "substantially insoluble" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of skill in the art would not be reasonably apprised of the metes and bounds of the claimed invention.

Independent claims 2 and 41, and the claims that depend from them, now state the newly added claim limitations: "said core consisting essentially of substantially insoluble surface oxidized copper powder, cuprous oxide, copper hydroxide, and combinations thereof," and thereby render the claims vague and indefinite. It is respectfully noted that applicant's amendment remove the Markush-type language formerly found at the point of question in claim 2. The current limitations are *not* drawn, in the alternative, to the claim elements insoluble surface oxidized copper powder, cuprous oxide, and copper hydroxide. Thus, the claims are drawn to the combination of these said claim elements. However, the limitation "and combinations thereof" suggest

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that different, alternative combinations are encompassed by the claims. Thus the claims are unclear as to the composition of the claimed core.

### ***Conclusion***

13. Claims 2, 4, 6-9, 11, 35, 36, 40 and 41 are rejected.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark L. Shibuya, Ph.D. whose telephone number is (571) 272-0806. The examiner can normally be reached on M-F, 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. James (Doug) Schultz can be reached on (571) 272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark L. Shibuya, Ph.D.  
Primary Examiner  
Art Unit 1639

/Mark L. Shibuya, Ph.D./  
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